

I claim:

1. A chip package substrate having a soft circuit board, an image-sensing chip being packaged on said chip package substrate, said soft circuit board being used as external signal connection lines, said chip package substrate comprising:

5 a multi-layer soft and hard composite PCB comprising a multi-layer hard PCB and at least a soft circuit board, said soft circuit board being extended out of said multi-layer hard PCB;

10 a plurality of conducting holes formed in said multi-layer hard PCB and said soft circuit board; and

 a plurality of conducting components electroplated on inner edges of said conducting holes on said multi-layer hard PCB and said soft circuit board to connect electrically said multi-layer hard PCB and said soft circuit board.

2. The chip package substrate having a soft circuit board as claimed in claim 1,

15 wherein a groove is formed in an upper side of said multi-layer soft and hard composite PCB to carry said image-sensing chip.

3. The chip package substrate having a soft circuit board as claimed in claim 2,
wherein said groove is formed in said multi-layer hard PCB.

4. The chip package substrate having a soft circuit board as claimed in claim 1,
20 wherein said multi-layer soft and hard composite PCB has a plurality of solder pads, which are distributed on an upper surface of a periphery of said multi-layer soft and hard composite PCB and connect part of said conducting components.

5. The chip package substrate having a soft circuit board as claimed in claim 1,

wherein said soft circuit board is located below said multi-layer hard PCB.

6. A method for manufacturing a chip package substrate having a soft circuit board, the method comprising the steps of:

providing a multi-layer soft and hard composite PCB; and

5 removing predetermined portions of said multi-layer soft and hard composite PCB to form said chip package substrate having a soft circuit board on said multi-layer soft and hard composite PCB.

7. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 6, wherein said multi-layer soft and hard

10 composite PCB comprises a multi-layer hard PCB and at least a soft circuit board, said chip package substrate is formed on said multi-layer hard PCB after predetermined portions of said soft and hard composite PCB are removed, and said soft circuit board is extended out of said multi-layer hard PCB.

15 8. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 6, further comprising the steps of:

forming a groove in said multi-layer soft and hard composite PCB; and carrying said image-sensing chip in said groove of said multi-layer soft and hard composite PCB after predetermined portions of said soft and hard

20 composite PCB are removed.

9. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 8, wherein said groove is formed in said multi-layer soft and hard composite PCB by means of milling.

10. The method for manufacturing a chip package substrate having a soft circuit

board as claimed in claim 6, wherein said multi-layer soft and hard composite PCB comprises a plurality of hard PCBs and at least a soft circuit board, two opposite chip package substrates having a soft circuit board are formed on said multi-layer soft and hard composite PCB after the predetermined portions of said hard PCBs and said soft circuit board are removed, and end portions of said soft circuit boards oppose one another and are connected together intermittently.

5 11. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 6, wherein said chip package substrate having a soft circuit board is formed on said multi-layer soft and hard composite PCB after predetermined portions of said multi-layer soft and hard composite PCB are removed, and said chip package substrate having a soft circuit board is intermittently connected with said multi-layer soft and hard composite PCB.

10 12. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 6, wherein predetermined portions of said multi-layer soft and hard composite PCB are removed by means of milling.

15 13. The method for manufacturing a chip package substrate having a soft circuit board as claimed in claim 6, wherein predetermined portions of said multi-layer soft and hard composite PCB are removed by means of drilling.

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